

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A computerized system that transforms hierarchical data into a rowset, the system comprising:
 - a parser that parses the hierarchical data to form an active store that holds a parsed image of the hierarchical data; and
 - a query processor that receives from a process a query of a database query language including a number of metaproPERTIES and that uses the query in selecting a subset of the data from the active store that matches the query to form the rowset, and returns the rowset to the process as query results.
2. (Original) The computerized system of claim 1, wherein the parser comprises: a module that converts the hierarchical data to an internal representation in the active store.
3. (Original) The computerized system of claim 2, wherein the internal representation is a document object model (DOM).
4. (Original) The computerized system of claim 2, wherein the internal representation is an edge table.
5. (Original) The computerized system of claim 4, wherein the hierarchical data is XML data.
6. (Original) The computerized system of claim 2, wherein the module comprises: a module that identifies nodes in the hierarchical data.

7. (Original) The computerized system of claim 1, wherein the query comprises: a Structured Query Language (SQL) statement.

8. (Original) The computerized system of claim 7, wherein the Structured Query Language (SQL) statement comprises: a SELECT statement.

9. (Original) The computerized system of claim 8, wherein the query includes row information and the column information comprising: a row pattern and one or more column patterns that identifies information in the XML active store.

10. (Original) The computerized system of claim 1, wherein the hierarchical data is XML data.

11. (Original) The computerized system of claim 1, wherein the hierarchical data is SGML data.

12. (Currently Amended) A method comprising:
receiving a query from a process;
identifying row and column information in hierarchical data using a database query language;
using a number of metaproPERTIES and the row and column information in
transforming the hierarchical data into a rowset; and
returning the rowset as query results to the process.

13. (Original) The method of claim 12, wherein identifying row and column information in the hierarchical data comprises: using a row pattern to identify row information in the hierarchical data; and using a column pattern to identify column information in the hierarchical data.

14. (Original) The method of claim 12, wherein using a number of metaproPERTIES and the row and column information in transforming the hierarchical data into a rowset comprises: using a parent ID metaproPERTY in transforming the hierarchical data into a rowset.
15. (Original) The method of claim 14, wherein using a parent ID metaproPERTY in transforming the hierarchical data into a rowset comprises: using the parent ID metaproPERTY in forming an edge table for use in transforming the hierarchical data into a rowset.
16. (Original) The method of claim 12, wherein using a number of metaproPERTIES and the row and column information in transforming the hierarchical data into a rowset comprises: using a parent ID metaproPERTY and a parent metaproPERTY in transforming the hierarchical data into a rowset.
17. (Original) The method of claim 12, further comprising: processing the rowset using relational techniques to form a second rowset.
18. (Original) The method of claim 17, further comprising: transforming the second rowset into a second hierarchical data stream.
19. (Original) The method of claim 12, further comprising: identifying and using implicit data in transforming the hierarchical data into a rowset.
20. (Previously Presented) A method comprising:
forming a rowset from an XML data file; and
adding overflow data to the rowset to form a second rowset.
21. (Original) The method of claim 20, wherein forming a rowset from an XML data file comprises: forming a query including a number of metaproPERTIES; and processing the XML data file using the query to form the rowset.

22. (Original) The method of claim 21, wherein adding overflow data to the rowset to form a second rowset comprises: adding a column to the rowset in which to include the overflow data.

23. (Currently Amended) A method comprising:

converting a first hierarchical data stream into a rowset via a database query language; and

inserting information into the rowset; and
converting the rowset back into a second hierarchical data stream without loss of data.

24. (Original) The method of claim 23, wherein converting the rowset back into a second hierarchical data stream without loss of data comprises: using a number of metaproPERTIES in converting the rowset back into the second hierarchical data stream.

25. (Previously Presented) A method comprising:

via commands of a database query language, receiving a rowset; and
using a number of metaproPERTIES in transforming the rowset into an XML data file.

26. (Original) The method of claim 25, wherein receiving a rowset comprises: receiving a rowset including overflow data.

27. (Original) The method of claim 25, further comprising: transmitting the XML data file.

28. (Original) The method of claim 25, wherein receiving a rowset comprises: receiving a rowset having a first data field associated with an ID metaproPERTY and a second data field associated with the ID metaproPERTY.

29. (Original) The method of claim 28, wherein using a number of metaproPERTIES in transforming the rowset into XML data comprises: fusing the first data field to the second data field in the process of converting the rowset into an XML data file.

30. (Previously Presented) A computer-readable medium having computer-executable instructions for performing operations comprising:

 via commands of a database query language, using a number of metaproPERTIES associated with a rowset to convert the rowset to an XML active store; and
 converting the XML active store to form XML formatted information.

31. (Currently Amended) The ~~computerized system~~ computer-readable medium of claim 30, further comprising: an XML formatter for transforming the active store to a second XML data file.

32. (Previously Presented) A computer-readable medium having computer-executable instructions for performing operations comprising:

 using a database query language, converting a first XML data stream into a rowset; inserting information having metaproPERTIES into the rowset.

33. (Previously Presented) A computer-readable medium having computer-executable instructions for performing operations comprising:

 via commands of a database query language, identifying row and column information in a hierarchical data stream; and

 using implicit information and the row and column information in transforming the hierarchical data stream into a rowset.

34. (Original) The computer-readable medium of claim 33, wherein the hierarchical data stream is an XML data stream.

35. (Original) The computer readable medium of claim 33, wherein the hierarchical data stream is an SGML data stream.

36. (Original) The computer readable medium of claim 33, wherein the hierarchical data stream is derived from data capable of being represented in a graph.
37. (Previously Presented) A computerized system for transforming hierarchical data into a rowset, the system comprising:
 - means for parsing the hierarchical data to form an active store; and
 - means for receiving a query of a database query language including a number of metaproPERTIES and for using the query in selecting data from the active store to form the rowset.
38. (Previously Presented) A system according to claim 1, wherein the database query language is the structured query language (SQL).
39. (Previously Presented) A method according to claim 12, further comprising:
 - using a number of metaproPERTIES and the row and column information in transforming the hierarchical data into a rowset.
40. (Previously Presented) A method according to claim 12, wherein the database query language is the structured query language (SQL).
41. (Previously Presented) A method according to claim 20, further comprising:
 - converting the second rowset into a second XML file without loss of data.
42. (Previously Presented) A method according to claim 23, further comprising:
 - converting the rowset back into a second hierarchical data stream without loss of data.
43. (Previously Presented) A method according to claim 23, wherein the database query language is the structured query language (SQL).
44. (Previously Presented) A method according to claim 25, wherein the database query language is the structured query language (SQL).

45. (Currently Amended) A ~~method~~ computer-readable medium according to claim 30, wherein the database query language is the structured query language (SQL).

46. (Currently Amended) A ~~method~~ computer-readable medium according to claim 32, further comprising: converting the rowset back into a second XML data stream without loss of data.

47. (Currently Amended) A ~~method~~ computer-readable medium according to claim 32, wherein the database query language is the structured query language (SQL).

48. (Currently Amended) A ~~method~~ computer-readable medium according to claim 33, wherein the database query language is the structured query language (SQL).

49. (Currently Amended) A ~~method~~ computerized system according to claim 37, wherein the database query language is the structured query language (SQL).